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EXAMINER

DOLINAR, ANDREW M

ART UNIT	PAPER NUMBER
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 16

Application Number: 09/787,952
Filing Date: March 23, 2001
Appellant(s): RICHARD, DANIEL

Matthew W. Stavish
For Appellant

EXAMINER'S ANSWER

MAILED

FEB 17 2004

GROUP 3700

This is in response to the appeal brief filed December 31, 2003.

(1) ***Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1, 2, 6 and 7 stand or fall together.

Appellant's brief includes a statement that claims 3, 8 and 11 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,032,632	BOLENZ et al.	3-2000
5,601,058	DYCHES et al.	2-1997

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Bolenz et al. An arrangement with a belt driven main electrical machine (starter/generator device 33) operating as a generator and motor is shown in Figure 4. The arrangement includes management means (control device 36) and a supplementary starter 37. The starter 37 is a conventional starter, which includes a pinion (column 1, lines 22-28). Operation of the driving unit is dependent on outer conditions, so that either the conventional starter, or the starter/generator, or both are activated (column 5, lines 52-57). Operation inherently requires that starter 37 first be actuated to engage the pinion, since this is how such a conventional starter operates, with starter/generator 14 then being actuated. The inherent function of starter/generator 14 is, by definition, to operate in generator mode after starter operation is completed. This operation is sufficient to anticipate starting actuation function as broadly specified by claims 1 and 6.

Regarding claims 2 and 7, the starting function is controlled according to engine temperature as disclosed at column 3, lines 34-59.

Claims 3, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolenz et al in view of Dyches et al. Bolenz et al discloses the claimed invention as stated above except for detecting a failure to start. Dyches et al teaches that it is known to provide an engine starting system with means for detecting a failure to start. If starter motor 80 fails to start the internal combustion engine within a pre-determined time period, first relay 50 will de-energize starter motor 80 (column 4, lines 60-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the starting system of Bolenz et al to include means for detecting a failure to start, as taught by Dyches et al, in order to protect the starting system from damage due to excessive cranking.

(11) Response to Argument

Arguments regarding the rejection of claims 1, 2, 6 and 7 under 35 U.S.C. 102(e) as being anticipated by Bolenz et al are presented on pages 6-8 of the brief.

Regarding claim 1, appellant argues that Bolenz et al fails to disclose the claimed management means. This argument ignores readily apparent similarities between features of the invention as set forth in appellant's detailed description and features of the starting arrangement of Bolenz et al. Appellant's management means is disclosed on page 5 as a module 9 of the drive electronics with no structural detail to distinguish it from control device 36 of Bolenz et al. Regarding the functions of the management means, the disclosure of Bolenz et al is directed to an automatic start-stop system (column 1, lines 5-19). In order to perform automatic start-stop operation, control device 36 must inherently provide a control sequence of

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energizing and deenergizing the starter 37 and/or the starter/generator device 33. There is also a sequence of first engaging the starter 37 and then driving the engine with it. This operation is embraced by the claimed "particular sequence". The function of "cutting off the operation of the main electrical machine in motor mode" is performed when only the starter 37 is used for starting. The claims do not require that the main electrical machine and supplementary starter be separately energized to apply starting rotation to the engine sequentially in a particular pattern. Appellant appears to be reading limitations from the specification into the claim.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences, which one skilled in the art would reasonably be expected to draw therefrom. See *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claim 6, the disclosure of Bolenz et al is directed to an automatic start-stop system (column 1, lines 5-19). In order to perform automatic start-stop operation, control device 36 must inherently provide a control sequence of energizing and deenergizing the starter 37 and/or the starter/generator device 33. There is also a sequence of first engaging the starter 37 and then driving the engine with it. The step wherein "the operation of the main electrical machine in motor mode is cut off" is performed when only the starter 37 is used for starting. The claims do not require that the main electrical machine and supplementary starter be separately energized to apply starting rotation to the engine sequentially in a particular pattern. Appellant again appears to be reading limitations from the specification into the claim.

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Under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986)

Arguments regarding the rejection of claims 3, 8 and 11 under 35 U.S.C. 103(a) as being unpatentable over Bolenz et al in view of Dyches et al are presented on pages 8-12 of the brief.

Regarding claim 3, the arguments directed against Bolenz et al and Dyches et al individually are moot since one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Arguments with respect to limitations in claim 1 have been addressed above.

At column 4, lines 60-63, Dyches et al states "if starter motor 80 fails to start the internal combustion engine within a pre-determined time period, first relay 50 will de-energize starter motor 80 by opening the circuit". This implies means for detecting a failure to start and then interrupting the starting process. It would have been obvious to add this feature to the starting system of Bolenz et al so as to interrupt operation of starter 37 and/or the starter/generator device 33 when the engine fails to start. The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. *In re Sernaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983). In this case, an expected beneficial result of protecting the starting system from damage is set forth at column 4, lines 65-67.

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Regarding claim 8, the arguments directed against Bolenz et al and Dyches et al individually are moot since one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Arguments with respect to limitations in claim 6 have been addressed above.

At column 4, lines 60-63, Dyches et al states "if starter motor 80 fails to start the internal combustion engine within a pre-determined time period, first relay 50 will de-energize starter motor 80 by opening the circuit". This implies the method step of detecting a failure to start and then interrupting the starting process. The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. *In re Sernaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983). In this case, an expected beneficial result of protecting the starting system from damage is set forth at column 4, lines 65-67. It would have been obvious to add this feature to the starting system of Bolenz et al so as to interrupt operation of starter 37 and/or the starter/generator device 33 when the engine fails to start in order to obtain this disclosed benefit.

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Claim 11 differs in scope from claim 3 only in that it includes the temperature sensor and means for comparing of claim 2. Bolenz et al discloses the temperature sensor at column 3, lines 57-59, and means for comparing is implied at column 3, lines 44-51.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Andrew M. Dolinar
Primary Examiner
Art Unit 3747

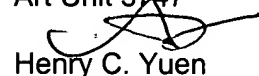
AMD

February 12, 2004

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